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THE PRACTICAL TEACHER

A WEEKLY JOURNAL FOR MASTERS MISTRESSES AND STUDENTS

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BRITISH MUSEUM

☛ SEE ALSO PAGE 63.

Examination Day in a Yorkshire School.

OMINOUS DAY! We have entered the turmoil of examination under the Hart Dyke Code. Our school is a 'mixed rural;' staff consisting of one P.-T., Assistant Mistress, and a Master. Population of school district under 500, although within two miles by road we have a considerable excess of this number. We claim under the first alternative of Article 105 the increased grant for small populations, and like Goldsmith's 'Spendthrift,' have had our claims allowed. Our schedules are duly presented to H.M. Inspector, to whom we convey the information that no applications have been made for labour certificates, hence our Duplicate Examination Schedule is a blank. Breakers ahead! would seem to be H.M. Inspectors' deduction; how about the compulsory clauses of the Act, and the partial and exemption standards now. Will the authorities accept re-classification in the same standard as a proof of the child not having reached this partial or exemption standard in a case of disputed attendance? We have entered a new phase of elementary school examination; individual pass and failure is practically nil. New idols have been set up on the 'plain of Dura'—'*Efficiency* and *In-efficiency*.' Woe betide the poor rural who worships at the latter shrine! Rurals, look to your new powers, do not let the irregular child be a drag and hindrance to his or her class; take Mr. Sneyd Kennersley's (H.M. Inspector) advice at Birkenhead. Write over your doors, 'This is no idiot asylum! Be true to yourselves and the day will be well with you.' The woe-begotten face of the teacher who sees his percentage of passes diminish as he nears examination will be known no more. A new era of happiness is in store for you, the key to which is written in large and luminant letters throughout this Code of 1890, 'Let the children know the *why* and the *wherefore* of everything taught in your school.' So far, this as a prelude; my readers are satiated, now for the more practical test of examination.

INFANT CLASS.

Arithmetic.—

The infants were examined much in the usual way from the concrete to the abstract.

Reading.—

The reading consisted of tests on the formation of words by the syllabic method, taken on the blackboard, *e.g.*, *Find* becomes ind, fin, fins, bind, mind; '*these*,' omit se, and sound 'th,' &c.

Writing.—

This consisted of the names of the children, and a short sentence in manuscript.

The whole of this work was one of class examination.

STANDARD I.

Arithmetic.—

In this subject the children were examined mainly on the principles of arithmetic and afterwards had one problematic question given to work on their slates. This was also a class examination. The test was much as follows:—

Inspector wrote the figure 4 on the board and asked the class what figure it was. He then wrote the figure 1 before it and asked the class the name of this new quantity (14), and further, what he had really added to the four to make it 14. Again, if the figure 2 were placed before it what will it be? (214.) What does the 2 really stand for? (200.) He then put a 2 under the 214 ($^{2}_{1}14$) and then asked the children if the second 2 was of the same value as the 2 in 214. How many times is the former greater?

Four squares were drawn on the board, into which were put 5 circles, calling each circle an apple, and asked how many apples altogether. Cutting them into halves, how many? If I cut them into quarters, how many?

He then wrote the following problem on the board and asked the class to work it.

In a school there were 248 boys and 129 girls, how many children altogether?

This problem was the only practical test given in arithmetic.

Writing.—

Children had to write a passage of manuscript from their reading books, carefully putting in all stops.

Reading.—

Correct phrasing was insisted on in this standard, together with suitable emphasis and expression. Intelligence tested in the knowledge shown of the subject read.

English:—

The usual number of lines of repetition, with questions on the meanings of words and phrases.

STANDARD II.

Arithmetic.—

The children were examined as a class, mainly on the principles of arithmetic; afterwards two problematic tests were given for the class to work. The inspector proceeded as follows—

4765 was written on the board, and the children asked how many units there were in this number. How many times could I take 10 away? How many times a hundred? How many times a thousand?

One child was asked to perform the mechanical operation of working out on the board a simple sum of multiplication, and was called upon to explain why she placed the units figure in the second line of multiplication under the multiplier (equal to multiplying by so many tens).

The following two problems were next written on the board and the children asked to work them on their slates (1) What number must I add to 346 to make 1284? (2) There are 24 trees and on each tree 480 apples. How many apples altogether?

Writing.—

A piece of dictation was given out from their class Reading books. Number of mistakes allowed according to instructions.

Reading.—

A part of the class were picked out to read while some of the girls did their sewing. Intelligence was tested by asking questions on the paragraph each child read. Nouns and verbs were then picked out from these paragraphs, and the children were required to make sentences containing these parts of speech, *e.g.*, folds, runs, &c., as nouns and as verbs.

Geography.—

A sketch was drawn on a slate of a river, and the Inspector drew from the children the fact that there must be tributaries added to the sketch. What simpler name were these little streams known by? (feeders). How do they feed the river? What is the beginning of a river

Teachers' Notes of Drawing Lessons for Standard I.*

By an Art Teacher under the London School Board.

XI.

(Rulers.)—'How long are your longest fingers?' Measure with ruler.

'How long are your hands?' Measure from tip of middle finger to wrist.

(Measure occasionally anything suitable and handy—books, slates, &c.)

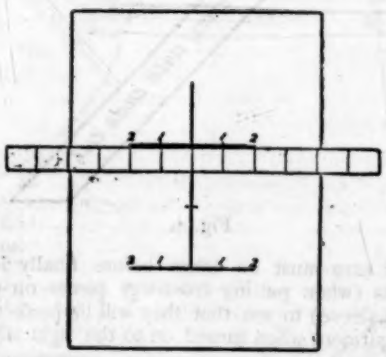
Rule an upright line down the middle, putting a mark at 2 inches long, another at 4 inches, and stopping at 6 inches. The line is divided into 3 equal parts.

Rule a level line across at the first mark, putting the ruler with a mark on the middle line, and marking one inch—two inches on each side. The second line is 4 inches long and divided into 4 equal parts.

See the slates.

Draw at the bottom a second horizontal line and mark it like the other.

See slates again, making sure that this part of the work is well done.



Draw upright lines at 2, 2, then at 1, 1.

Draw slanting lines from top, with a little bit over at 2, 2.

Rub out parts that are done with, and strengthen the rest.

'What is it?' If the work is satisfactory, then—'Draw the dog.'

XII.

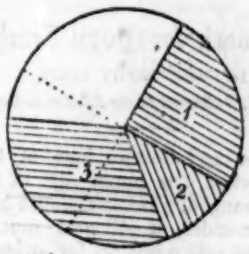
Angles.—Illustrate with a large pair of compasses, two jointed sticks, or two rulers held together at the angle between the finger and thumb.

Make a square corner and give its name—Right angle.

Draw one on blackboard—alter the position—lengthen and shorten the lines—make them unequal. In all the changes the corner remains the same, still square, still a right angle.

Show with clock-face—there is a *quarter* of an hour between the hands.

'Here is a round cake.'



Show real one, or round piece of paper pinned on blackboard, or draw on blackboard.

The first bit cut out is a *quarter* of it (1).

The corner of the piece is a *right angle.*

The second bit is *smaller*—its angle is *sharper.*

The third bit is *larger*, angle *not so sharp.*

Show these also on clock-face, &c.

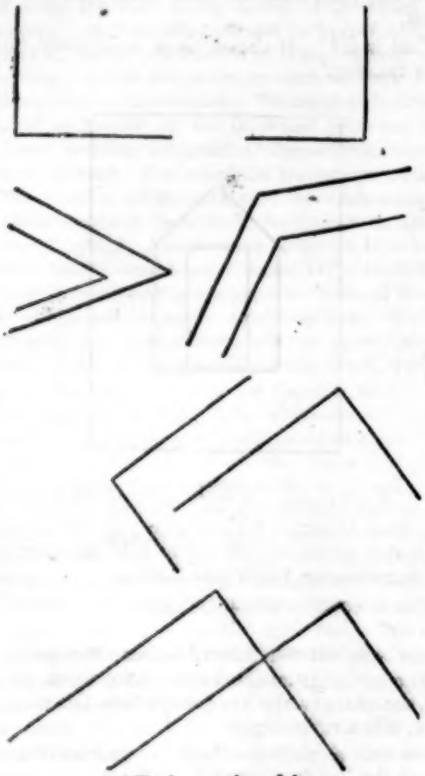
Write on board:—

Square ... A *right* angle.
Sharper ... An *acute* angle.
Not so sharp An *obtuse* angle.

Illustrate again with everything available, and question closely. Opening and shutting alters the angle, not lengthening or shortening the lines.

* The Teaching of Drawing becomes compulsory on September 1st, 1891. These articles will be specially helpful to teachers who know but little of the subject. They will teach them how to teach it successfully.

In a right angle the two lines are *perpendicular to each other.* Floor and walls are perpendicular to each other; they make right angles; when they don't, the house tumbles down. Draw examples.



(To be continued.)

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Needlework for Pupil-Teachers.

BY MISS SOPHY LOCH,

Examiner of Needlework to the London School Board.

THE side seams and bottom hem of the chemise having been worked, the upper part of the garment must now be arranged. If the chemise be made with a fairly wide shoulder, it will wear much better for having a piece of calico put on for strengthening on the wrong side of the garment, from the neck to the sleeve. It should be cut the selvedge way of the cloth, and either hemmed on the wrong side, or stitched on the right; the width of this shoulder-binder varies with the size of the garment. Great care must be taken in tacking it on to make it run perfectly even with the threads of the garment.

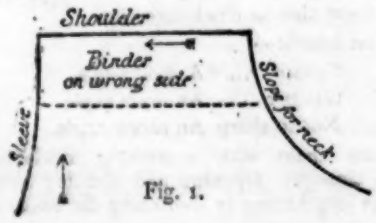
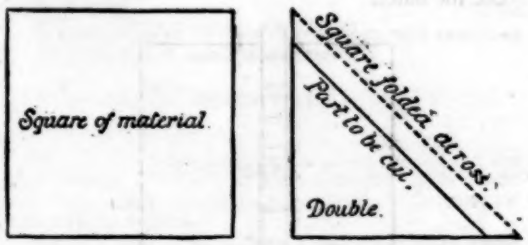


Fig. 1.

The sleeves or armholes are the next consideration, and can be finished off in various ways. One of the simplest ways is to turn them down as for an ordinary hem (which will be a little narrower on the shoulder), hem them on the wrong side and feather-stitch them on the right; or the material can be turned on to right side and stitched or feather-stitched. These two methods can only be adopted when the sleeve is not very much sloped. The neatest and best way is to put on material cut on the cross, and would be the method preferred by most, as it gives of course a better finish to the garment. To cut these cross-way pieces requires care, as the material is liable to stretch, and in consequence become crooked. Cross-way pieces must be cut right across a square, in a slanting direction, from corner to corner. It is a good plan to put the north side of the square of material (out of which the pieces are to be cut) to the east or west side, and cut across the double material for the required width and length, taking care to keep it flat on the table. In putting on the cross-way piece put the right side of the piece to the wrong side of the garment, first tack, and then run and backstitch neatly and firmly along both edges.



Figs. 2 and 3.

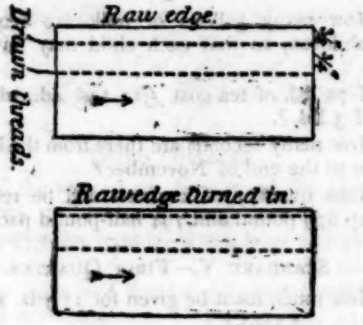
The ends of the cross-way pieces must be cut slanting and joined with the long end of one piece to the short end of the other.

Fig. 4.

Great care must be taken before finally joining the ends (when putting cross-way pieces on to the chemise sleeve) to see that they will lie perfectly flat on the garment when turned on to the right side and stitched.

The front opening has now to be arranged. A very simple way of doing this is to tear or cut down the material the required length (in full-sized chemises about five inches to five inches and a half is usual)

about half an inch out of the centre of the garment; the side which is minus the half inch will have a band put on it. Let the worker take a piece of material cut selvedge way a little longer than the slit just made, and about two inches and a half wide. I will call this the front band. A thread must be drawn for stitching about three-eighths of an inch away from the raw edge, and a second one about three quarters of an inch away from the first. The material must be turned down once about an eighth of an inch away from the first drawn thread, as in diagram No. 6.



Figs. 5 and 6.

Let the bottom of the front band be turned once, then tack the band on to the garment on the right side, so that the bottom of the band just reaches the bottom of the slit, as in diagram No. 7.

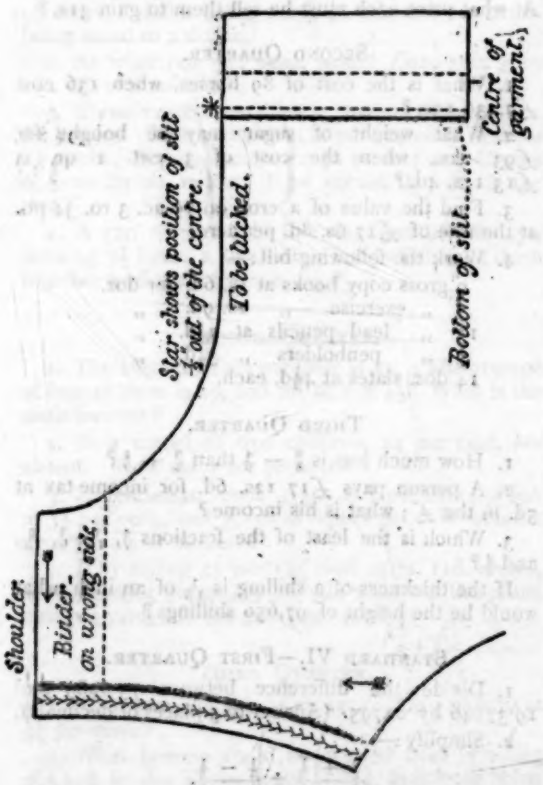

Centre of garment.
Bottom of slit.
Star shows position of slit ⅛ out of the centre.
To be tacked.
Shoulder.
Binder on wrong side.

Fig. 7.

The band must now be stitched on to the garment, the stitching falling in the space left by the first drawn thread. When this is done, the other side of the band must be turned in, leaving an eighth of an inch between folded edge and the second drawn thread. It will be seen at once that the band at the back is now wider than it is in the front. The surplus piece must be turned in and hemmed, care being taken that the hemming stitches are concealed by the band in the front. The latter is not yet finished. It must be stitched at the second drawn thread, right through the double material, and the bottom of the band hemmed on to the garment. The second side of the front opening will have been previously arranged for a graduated hem. If this little band which has been described is put on properly it looks very neat, and obviates the necessity of making a little pleat in the garment at the bottom of the slit or front opening. A little piece of tape can be put on at the back of the slit, should extra strength be required.

(To be continued.)

—o—

Quarterly Arithmetical Tests.

BY JOSEPH WOLLMAN,

Head Master of the Wellgate Board School, Rotherham.

Standard I.—First Quarter.

1.	8	2.	497	4. In a school there are 246 boys, 178 girls, and 359 infants. How many children are there altogether?
	14		32	
	9			
	370	3.	625	
	62		521	

Second Quarter.

1.	604	2.	960	4. England is 420 miles long and 360 miles broad. How much longer is it than it is broad?
	75		316	
	839			
	7	3.	248	
	96		175	

Third Quarter.

1.	461	2.	503	4. George has 46 marbles, John has 5 more than George, and Thomas has 8 more than John. How many have they together?
	780		498	
	279			
	608	3.	834	
	547		349	

Standard II.—First Quarter.

1. 74,056 + 8,149 + 19,270 + 6,008 + 50,724 + 3,597.

2. Multiply 78,094 by 53.

3. From 67,035 subtract 9,408.

4. I had 706 nuts. I gave 158 to William, 39 more to John, and 27 less to Harry. How many had I left?

SECOND QUARTER.

1. Divide 54,480 by six, and write the answer in words.

2. From the difference between 70,010 and 30,046, take 19,528.

3. What is the product of 870 and 69,507?

4. A boy had 98 marbles. He kept 23 for himself, and divided the rest equally among his five brothers. How many did each brother get?

THIRD QUARTER.

1. How many greater than 39,627 is 40,014?

2. 54,793 × 6,090.

3. How many dozen are there in ninety-one thousand seven hundred and forty?

4. George has 5 boxes of marbles each holding 78, and Charles has 6 boxes each holding 69. How many more has Charles than George?

STANDARD III.—FIRST QUARTER.

1. 40,068 ÷ 406.

2. How many times can 368 be taken from 247,020?

3. There are 1,760 yards in a mile. How many yards are there in 9,785 miles?

4. A farmer has 23,423 sheep in 59 fields. How many less than 400 are there in each field?

SECOND QUARTER.

1. What is the sum of £987 19s. 10$\frac{3}{4}$d., £316 14s. 9$\frac{1}{2}$d., 18s. 7$\frac{1}{4}$d., £39 15s. 6$\frac{1}{2}$d., £4 12s. 11d., £508 13s. 3$\frac{3}{4}$d., and £20 10s. 8$\frac{1}{4}$d.?

2. Take £80 13s. 10$\frac{1}{2}$d. from £615 19s. 9$\frac{1}{4}$d.

3. Two ships sail in opposite directions; one goes 167 miles a day, and the other goes 159. How far will they be apart in 85 days?

4. Work the following sum:—£7 18s. 6$\frac{1}{2}$d. + £9 13s. 7$\frac{3}{4}$d. − £12 15s. 10$\frac{1}{2}$d. + £8 14s. 9$\frac{1}{4}$d. − £6 19s. 11$\frac{3}{4}$d.

THIRD QUARTER.

1. How much must be added to £748 17s. 7$\frac{3}{4}$d. to make £50,017 14s. 7$\frac{1}{4}$d.?

2. £9,306 14s. 6$\frac{1}{2}$d. + £74,538 16s. 11d. + £390 18s. 9$\frac{3}{4}$d. + £25,075 15s. 4$\frac{1}{2}$d. + £8,649 17s. 10$\frac{1}{4}$d. + £72 19s. 8$\frac{1}{4}$d. + £13,834 11s. 11$\frac{3}{4}$d.

3. Divide the sum of 257,068 and 439,705 by the difference between 3,407 and 4,276.

4. A man earns £1 14s. 6d. weekly, and his son earns 7s. 9d. If they save 13s. 8d., how much do they spend weekly?

STANDARD IV.—FIRST QUARTER.

1. £579 16s. 5$\frac{3}{4}$d. × 97.

2. Divide two million five hundred and three thousand and forty-two pounds six shillings by two thousand nine hundred and four.

3. A farmer bought a cow and 29 sheep for one hundred pounds. He paid £2 15s. 9d. each for the sheep. How much did he pay for the cow?

4. What sum multiplied by 360 will give £324,303 15s.?

SECOND QUARTER.

1. A man saves 8s. 5d. a week. How long will it take him to save £30 6s.?

2. Find the number of tons, &c., in five million fifty thousand five hundred ounces.

3. Give the difference in square yards between 65 acres 3,784 sq. yards. and 39 acres 28 poles.

4. Find the cost of paving a street, 5 fur. 38 po. in length, at 5s. 9d. per yard.

THIRD QUARTER.

1. How many gallons of milk are required for 3,450 children, so that each child may have half-a-pint?

2. If 70 lbs. of tea cost £11 13s. 4d., what is the price of 3 lbs.?

3. How many seconds are there from the beginning of June to the end of November?

4. What quantity of currants will be required to make up 879 pound and 794 half-pound packages?

STANDARD V.—FIRST QUARTER.

1. How much must be given for 17 yds. 2 ft. 10 in. at 5s. 7$\frac{1}{2}$d. per yard?

2. What is the value of 1,907$\frac{3}{8}$ acres at £57 18s. 6$\frac{1}{2}$d. per acre?

3. Find the wages for 25 weeks 4 days 7 hours at £1 11s. 6d. per week, reckoning 9 hours a day and 6 days a week.

4. A man bought 1,488 oranges at 9d. per dozen. At what price each must he sell them to gain 31s.?

SECOND QUARTER.

1. What is the cost of 89 horses, when 136 cost £2,439 10s.?

2. What weight of sugar may be bought for £93 12s., when the cost of 3 cwt. 1 qr. is £13 17s. 4d.?

3. Find the value of a crop on 79 ac. 3 ro. 34 po. at the rate of £17 6s. 8d. per acre.

4. Work the following bill:—

9	gross copy books	at 1s. 6d.	per doz.
5	„ exercise „	2s. 9d.	„
13	„ lead pencils	at 7$\frac{1}{2}$d.	„
7	„ penholders „	3$\frac{1}{2}$d.	„
14	doz. slates	at 4$\frac{1}{2}$d.	each.

THIRD QUARTER.

1. How much less is $\frac{3}{5} - \frac{1}{3}$ than $\frac{3}{5} + \frac{1}{3}$?

2. A person pays £17 12s. 6d. for income-tax at 5d. in the £; what is his income?

3. Which is the least of the fractions $\frac{4}{7}$, $\frac{5}{12}$, $\frac{3}{5}$, $\frac{6}{11}$, and $\frac{2}{3}$?

If the thickness of a shilling is $\frac{1}{8}$ of an inch, what would be the height of 97,650 shillings?

STANDARD VI.—FIRST QUARTER.

1. Divide the difference between 75·6089 and 19·37046 by ·04795. (Answer to 5 places of decimals).

2. Simplify:—

$$\frac{\frac{1}{3} + \frac{1}{5}}{\frac{1}{3} \times \frac{1}{5}} \div \frac{\frac{1}{3} - \frac{1}{5}}{\frac{1}{3} \div \frac{1}{5}}.$$

3. Multiply 7·94$\frac{5}{7}$ by 9$\frac{3}{8}$, and give the answer as a decimal.

4. Reduce to a decimal $\frac{5}{6}$ of $1\frac{1}{2}$ of $\frac{6\frac{3}{4}}{11\frac{2}{3}}$.

Second Quarter.

1. The sum of £401 16s. is to be raised in a parish, the rateable value of which is £10,714 13s. 4d. What is the rate in the pound?

2. Reduce £7 9s. 0½d. to the decimal of 5½ guineas.

3. If 3½ yards of silk cost 15s. 10d., what would 7$\frac{7}{8}$ yards cost?

4. A person owned $\frac{5}{9}$ of a ship, and sold $\frac{3}{4}$ of $\frac{1}{2}$ of his share for £412 10s. What was the value of the ship?

Third Quarter.

1. Find the interest on £6 13s. 4d. for 7$\frac{3}{4}$ years at 4$\frac{1}{2}$ per cent.

2. If 5·875 lbs. cost £ ·458$\frac{1}{3}$, what will 38·4$\frac{5}{7}$ lbs. cost?

3. How long will it take £65 to amount to £84 10s. at 3½ per cent.?

4. A cistern is $\frac{7}{8}$ full, but after 200 gallons are drawn off and 108 gallons let in, it is found to be $\frac{5}{9}$ full. How many gallons will the cistern contain?

Standard VII.—First Quarter.

1. Find the value in English money of 279 dollars 98 cents., a dollar being worth 4s. 2d., and 100 cents. being equal to a dollar.

2. At what rate per cent. would £920 gain £19 18s. 8d. in 8 months?

3. Three cowkeepers hire a pasture for £70 15s. for a year. During the time A puts 14 cows in it for 13 weeks; B puts 7 cows for 36 weeks; and C puts 6 cows for 22 weeks. How should they divide the rent?

4. A can reap a field in 7 days and B in 8 days, working 7½ hours a day. How long will it take them together working 8 hours a day?

Second Quarter.

1. The average of six numbers is 35. The average of four of them is 29, and the fifth is 45. What is the sixth number?

2. In a school of 650 children, 14 per cent. are absent. How many are present?

3. A gentleman lends £350 at 4 per cent., £600 at 3½ per cent., and £250 at 6 per cent. What is his average rate of interest?

4. If by selling 39 yards of cloth at 7s. 11d. a yard, a shopkeeper gains £3 1s. 9d., what was the prime cost per yard, and the gain per cent.?

Third Quarter.

1. What sum will gain £14 15s. 9d. in 7 months at 3½ per cent.?

2. What income would be derived from investing £5,738 in the 3$\frac{3}{4}$ per cents. at 94$\frac{1}{4}$, brokerage being $\frac{1}{8}$ per cent.?

3. A man spent 10 per cent. of his money, and then 10 per cent. of the remainder. He had £28 7s. left. How much had he at first?

4. At what price do the 3$\frac{1}{4}$ per cents. pay 4 per cent., brokerage being $\frac{1}{8}$ per cent.?

ANSWERS.

Standard I.

	First.	Second.	Third.
1.	463.	1,621.	2,675.
2.	465.	644.	5.
3.	104.	73.	485.
4.	783 children.	60 miles.	156 marbles.

Standard II.

	First.	Second.	Third.
1.	161,804.	9,080.	387.
2.	4,138,982.	20,436.	333,689,370.
3.	57,627.	60,471,090.	7,645 dozen.
4.	220 nuts.	15 marbles.	24 marbles.

Standard III.

	First.	Second.	Third.
1.	98 + 280.	£1,879 5s. 9d.	£49,268 16s. 11$\frac{3}{4}$d.
2.	690 times.	£535 5s. 10$\frac{1}{2}$d.	£131,859 15s. 2$\frac{1}{4}$d.
3.	17,221,600 yards.	27,710 miles.	801 + 704.
4.	3 sheep.	£6 11s. 1$\frac{1}{4}$d.	£1 8s. 7d.

Standard IV.

	First.	Second.
1.	£56,242 18s. 5$\frac{3}{4}$d.	72 weeks.
2.	£861 18s. 7d.	140 tons 18 cwt. 11 qr. 12 lbs. 4 oz.
3.	£19 3s. 3d.	128,777 sq. yds.
4.	£900 16s. 10$\frac{1}{2}$d.	£376 6s. 9d.

	Third.
1.	215 gals. 2 qts. 1 pt.
2.	10s.
3.	15,811,200 seconds.
4.	11 cwt. 1 qr. 16 lbs.

Standard V.—First.

1.	£5 0s. 11$\frac{1}{4}$d.
2.	£110,490 2s. 4$\frac{1}{2}$d.
3.	£40 12s. 7d.
4.	1d.

Second.

1. £1,596 8s. 9d.
2. 1 ton 1 cwt. 3 qrs. 21 lbs.
3. £1,386 0s. 4d.
4. £8 2s. + £8 5s. + £4 17s. 6d. + £1 4s. 6d. + £3 3s. = £25 12s.

Third.

1.	$\frac{3}{5}$.
2.	£870.
3.	$\frac{3}{4}$.
4.	32 po. 4 yds. 2 ft. 6 in.

Standard VI.

	First.	Second.	Third.
1.	1,172·85589....	9d.	£2 6s. 6d.
2.	100.	1·2964.	£3.
3.	76·475972.	£1 19s. 4$\frac{1}{2}$d.	8$\frac{1}{2}$ years.
4.	·45.	£1,890.	288 gallons.

Standard VII.

	First.	Second.	Third.
1.	£58 6s. 7d.	49.	£780.
2.	3$\frac{1}{2}$ per cent.	559 children.	£228.
3.	A £22 15s., B £31 10s., C £16 10s.	4$\frac{1}{2}$ per cent.	£35.
4.	3$\frac{1}{2}$ days.	6s. 4d.; 25 per cent.	81$\frac{1}{3}$.

Scholarship Latin.

BY L. HUXLEY, B.A.,

Classical Master Charterhouse School.

THE Latin language was spoken in Rome and Latium. It afterwards spread with the Roman conquests over Italy, Sicily, France and Spain.

ALPHABET.

The Latin alphabet, as generally written, is the same as the English (which was borrowed from it), except (1) it has no W; (2) K only survives before A in one or two proper names and abbreviations, such as Kaeso, Karthago, Kal. (Kalendæ).

Properly, however, classical Latin had neither j nor v apart from j and u, which did double duty; while y and z were used from Cicero's time to express the corresponding sounds in words taken from the Greek.

The alphabet was therefore: a b c d e f g h i k l m n o p q r s t u x — y z.

PRONUNCIATION.

There are two recognised modes of pronouncing Latin in England. (1) With the English sounds of the letters (ch being hard, as in chemist). (2) With the Italian vowels, c and g and t always hard, v = w, or French ou in oui.

Thus—ā as a in father.
ă ,, a in idea, America.
ē ,, e in eh? or ay in stay.
ĕ ,, e in get, eh? short.
ī ,, i in machine.
ĭ ,, i in fifty, lowlier.
ō ,, o in holy.
ŏ ,, o in omit.
ū ,, oo in food.
ŭ ,, oo in foot.
y between u and i (German ü).

Diphthongs.—

ae like ay (later as ē), yes		au as ow in *now*.
oe ,, oy		ei as in *eight*.
eu ,, eh'oo	(as a diphthong, two successive sounds	ui as in we or oo'ee.

Consonants.—

as in English except:
- c and g always hard, as come, get.
- s always sharp, as in steps.
- i cons. (or j), as y in you;
- u cons. (or v), as *w* in wing; qu, as in English.
- bs, as ps; ch, as k;
- n before s or f, combined with the preceding vowel, somewhat as a French nasal *n*, making the vowel long.
- z as ds in la*ds*.
- th separate, as in outhouse; later, as *th*in.

So ph, ch, as p + h, k + h.

Quantity and Accent.—Quantity is the length or shortness of a syllable. Vowels are long or short (as regards pronunciation) according to nature.

Syllables (1) are long or short (as regards metre and accent) according to the nature of their vowel, or (2) when short may be made long by *position* owing to consonants following:—

1. A vowel before another vowel or h is short: nĭhil.
   A diphthong is long, as clāūdo; so is a vowel derived from a diphthong, re-clūdo (for claudo).
3. A contracted vowel is long, nīl (for nihil).
4. A syllable is long by *position* when its vowel is followed by two consonants (except a mute with l or r), or by the double consonants x and z.

   [Before nf and ns, gn and gm and i consonant, the vowel itself becomes long by nature: īgmen, hūius.]
5. A short vowel followed by a mute with l or r makes the syllable common, *i.e.*, it may be long or short in verse.
6. A vowel before nd, nt, is regularly short by nature (*i.e.* for pronunciation), though long by position: amănt, amandus, from amāre.

In Latin words of more than one syllable, the accent is on the penult (last syllable but one) or the antepenult (last but two:

1. Words of two syllables, always on the first syllable: tŕibe, Róma.
2. Words of more than two, upon the penult, if that be long (amīcus); but if that be short or common, upon the antepenult: dŏmĭnus, lătĕbræ.
3. When an enclitic (which has no accent of its own) is added to a word, the syllable preceding the enclitic is accented, whether long or short.

Exceptions.—

1. Certain compounds of *facio* retain the accent of the simple verb: benefăcit, calefăcit. They are phrases rather than true compounds.
2. The contracted Gen. or Voc. in ī of substantives in ius, retain the original accent: Vergĭlius, Vergĭlī.
3. Similarly with some other words which have lost a final vowel: produc̆, for produc̆e; illic̆, for illic̆e.

INFLECTIONS.

The chief difference between Latin and English grammar lies in the number of inflections kept by Latin nouns and verbs.

English has lost all but a few; as, the sign of the plural and the possessive in substantives; of the object also in pronouns; of the 2nd and 3rd persons singular, and of past time in verbs.

Other changes in meaning are expressed either by the order of the words or by prepositions and auxiliary verbs.

Now in Latin there is (in nouns, pronouns, and verbs) a change of inflection to express each of these changes in meaning.

Thus nouns own in general six cases in the singular, and as many in the plural; of which the names and most usual meaning are as follows:—

The Nominative is the case of the Subject (to a finite verb).
,, Vocative* ,, ,, that which is addressed.
,, Accusative ,, ,, the Direct Object.
,, Genitive ,, ,, the Possessor.
,, Dative ,, ,, the Indirect Object.
,, Ablative is the Adverbial case, equivalent in itself to an adverbial clause in English.

Among names of places the old *Locative* case is also retained. This expresses the '*place at which*.'

Stems.—That part of a word to which inflections are added is called the stem.

(To be continued.)

* The Vocative, however, has the same form as the Nom., except in the 2nd declension and in some nouns borrowed from the Greek.

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THE result of the election for the Vice Presidency of the N.U.T. is announced. Mr. Yoxall heads the poll with 3,965 votes; Mr. Bowden comes next with 2,429 and Mr. Gray follows with 1,456. The members are to be heartily congratulated upon the high excellence of the candidates from among whom they had to choose this year. The dignity and the interests of the Union would have been safe in the hands of any one of them; each would have done credit to himself and to the office.

***

WE confess that we should have been better pleased if the choice had fallen upon Mr. Bowden. Being some years older than his fellow candidates (we will not say rivals) his record of honourable service is longer, and if promotion went by seniority his turn should have come first. Still the full recognition of his claims is deferred, not denied; if he consents to be put in nomination in 1892 his return ought to be certain.

***

WE congratulate Mr. Yoxall upon his election. From a man of his vigour, progressive opinions, and many-sided ability, we look for great things, and feel confident that we shall not look in vain. Having won so early the highest prize that the Union can confer upon him we do not know what higher prize there is for him to covet. Perhaps he will be like the sailor to whom a good fairy offered three wishes. 'What would you like first?' said she. 'All the rum in the world' replied the tar. 'And next?' 'All the 'baccy in the world.' 'And next?' The honest sailor scratched his head for a time and then answered 'A little more rum.' Perhaps Mr. Yoxall, having been once President, may think it worth ambition to be President once more.

***

THERE is one feature in the election which is not very satisfactory. Including 73 papers cancelled for informalities only 7,914 were sent in; in other words only half the members of the Union took the trouble to record their votes on so important a matter as the election of next year's President. The professional spirit cannot be altogether wanting in the eight thousand who abstained or they would not have paid their subscriptions, but the interest which they take in the proceedings must be very small. The apathy of the followers must weaken and dishearten the leaders; we can expect vigorous action from a body corporate only when quick life is pulsating from the centre to the remotest extremities.

***

A THOROUGHLY satisfactory method of choosing the Executive has yet to be adopted. Formerly the election took place at Conference, the votes of the Associations being entrusted to the representatives; now the election takes place at the local Associations, a voting paper being issued to each individual member. The old plan offered a premium on canvassing, and under it a person might owe his return not to his merits so much as to persistent touting. The present plan increases the disabilities of modest worth. Representatives at Conference did have an opportunity of seeing, and sometimes too many opportunities of hearing, every candidate for honours, but now many a man whose capacity, energy and zeal for the Union are well known in his own district has never been heard of by the vast majority of the constituency to whose suffrages he is appealing. Under the old plan touting might be the secret of success, under the present plan self-advertisement may be. It would be instructive to compare the signatures to the letters recently published in the educational press with the names on the Executive voting paper.

***

THE best method that has hitherto been suggested is the division of the country into districts, each electing its own members on the Executive. Good local work would thus stand a chance of recognition, and every interest might be represented. We can think of but one objection to this plan—it would increase the proportion of country members. Members living at a distance from London can attend few Committee meetings, and they cannot attend any meetings without some cost to the Union. But it must be remembered that if a larger number of country members would mean increased travelling expenses for attendance in London it would mean diminished travelling expenses for attendance at local meetings. Now the supervisors for Cumberland, Westmoreland, Lancashire, Cheshire, North and Mid Wales, Derby, Nottingham, Lincoln, Norfolk, Suffolk, Cambridge, Bedford, Bucks, Wilts, Dorset, Sussex and Hampshire live in London: under the suggested plan they would live in the districts named.

The 1891 Scholarship Examination.

BY DR. GEORGE BEACH, M.A.

Co-Author of 'A Manual of our Mother-Tongue,'

Author of 'Elements of English,' 'Entertaining Readers.'

WE regret to say that our last published Routine was wrongly dated. It should have been headed 'Week commencing 2nd February, 1891.' However considering the time of its publication, and the contextual remarks, we hope and believe that the mis-print has caused no confusion.

WEEK COMMENCING 9TH FEBRUARY, 1891.

DAYS.	FIRST HOUR.	SECOND HOUR.	THIRD HOUR.
M.	Problems leading to Simple Equations *or* Ingredients of Food	Dynastic Tables and Dates	Latin *or* French
TU.	Euclid, Book I., First 11 Propositions *or* Flannel Sampler	Maps of Mississippi and W. Seaboard of U.S.	Science
W.	Proofs of Fractional Operations	Drawing	Analysis and Parsing
TH.	Algebraic H.C.F. (G.C.M.) *or* Preparation of Food	From 1711 to 1716	Latin *or* French
F.	Deductions of Euclid up to I. 12 *or* Flannel Sampler	Physical Geography of United States	Science
S.	Mensuration Simple and Compound Proportions	Repetition and Macaulay's Essay on William Pitt	School Apparatus and Premises	Saxon Affixes and Prefixes

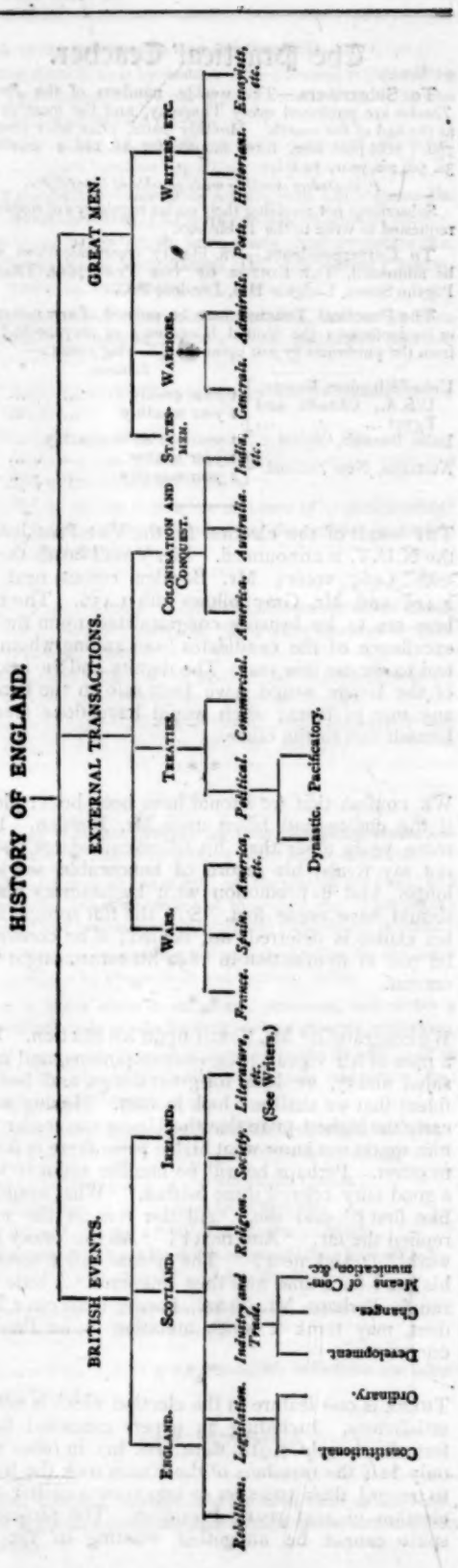
HOW TO STUDY HISTORY.

1. By *reading* three or four times through the account of the Period set, obtain a somewhat elementary knowledge of *the due sequence of events.* This is of course most important, as without it, (*a*) no proper understanding of Historical evolution can be obtained; (*b*) the events are more difficult of remembrance, as the 'Principle of Association' is not utilised, and (*c*) dates cannot be *approximately* fixed.

2. Learn thoroughly the dates given in Mr. Curtis' book; pages 35 to 48 should a little at a time be committed to memory; we would even venture to assert that, if the student did not read another line, but was master of these fourteen pages, and was competent to use the contained knowledge to the best advantage, he would not fail in history. Let us not be mistaken, however, we are not recommending 'CRAM,' or the minimum of acquisition, but simply showing the invaluable and essential importance of an accurate and orderly knowledge of even a bare outline. The hours occasionally set apart for dates are not the only time in which they should be studied, but are intended to facilitate intimate acquaintance with them.

3. Next having studied the Period as a whole, untwist the different strands of the historic rope, and examine them independently; thus the history of colonial development, the history of Ireland and Scotland, of maritime and military enterprise, of parliamentary, literary, industrial, religious, and social progress should all be separately examined.

We submit a TABLE which should be a great assistance to the student.



Even if our readers cannot find time to unravel each particular thread, the above analytical table will be most useful—(1) as showing how questions are framed, and (2) to test their knowledge and progress.

E. G. What important events happened in.....? Mention the principal struggles with France from.....to..... Who were the great writers during the reign of.....? What changes in the centres of population have taken place since.....? Enumerate our commercial treaties with.....during..... Compare the extent of our Possessions in..... with those we held in.....

It is not to be denied that many of these divisions overlap each other, but (carrying out our simile) this is simply owing to the interlacing of the various strands of the historic rope.

Meanwhile it should not be forgotten that while we are studying the period thus scientifically we are obtaining greater benefit than would be received by unmethodical revision. Thus the lives of great men are the mirrors of contemporary events; religion and industry are great factors in social progress; colonisation, inventions, and means of communications are the propagators of trade —and so we might illustrate *ad infinitum*.

4. Doubtless the student who intends to achieve a First Class will require an historical NOTE BOOK; but this need not be used to the extent often recommended. If study is carried on with pencil in hand, sub-lineations and marginal notes will save much time and labour. Sometimes different coloured leads may be used with advantage, such as red for military matters, blue for political and literary, and prosaic black for the ordinary detail of every day progress.

But such minor matters must be left to the taste and opportunities of our readers.

5. It will have been noted, that the literature we recommend to be read will be most helpful to an intelligent comprehension of this subject.

REMARKS ON ROUTINE.

(*a*) Where the work for Males and Females is different, the lower half of the rectangle is dedicated to the latter.

(*b*) The Literature given for Saturday is also intended to be read throughout the week as a recreation.

(*c*) Three *copies* should be written every week, one each of Large, Round, and Small-hand.

(*d*) The services of a friend should be utilised for seven minutes in giving out the Dictation.

(*e*) Towards the close of May, three hours (previously occupied by Science and Drawing) will be set free to be devoted to Music, History, Geography and English, &c.

(*f*) SIMPLE EQUATIONS.

Hamblin Smith, Example XXXIII., sums 3, 6, 9 to 39; *or*
Charles Smith, Example XVII., sums 8, 12, 20 to 55; *or*
Todhunter, Example XXI., sums 4, 8, 12 to 48.
H.C.F. or G.C.M.
Hamblin Smith, pp. 70, 71, Article 128.
Charles Smith pp. 110, 111, Article 110.
Todhunter, pp. 58, 59, Articles 106, 109.

(*g*) EUCLID.

(1) *Deighton*, pp. 17 to 24; (2) Exercises and Notes up to pp. 24.

(1) *Todhunter*, pp. 12 to 16; (2) pp. 255, 256 and 257 and Exercises 8, 10 13, 15 on pp. 340 and 341.

(*h*) MENSURATION.

Areas of parallelograms and triangles pp. 70, 79. Solve as many examples as possible. The same work will be given next week.

(*i*) ARITHMETIC.

Males.—Pendlebury, Articles 113, 129, 136, 165, 175, 177 to 182.

Females.—(1) *Dixon and Beach*, pp. 82, 84, 90, 91, 98, 99 and (2) p. 134, sums 2, 3, 9, 10 and p. 147, sums 1, 2, 11, 12.

(*j*) HISTORY.

(1) Dates in *Curtis* from 1688 to 1716, and Dynastic Tables of descent of Stuarts and Hanoverians from Tudors.

(2) *Sanderson*, pp. 289 to 298; *or*
Ross, pp. 341 to 346.

(*k*) GEOGRAPHY.

(2) *Anderson*, Revise pp. 176 to 180.
Moffatt, Read pp. 345 and 346, and find out on map places mentioned on pp. 342 to 344.

(*l*) ENGLISH.

(1) Analyse the following passage:—

'As in a theatre, the eyes of men,
After a well-graced actor leaves the stage,
Are idly bent on him that enters next,
Thinking his prattle to be tedious;
Even so, or with much more contempt, men's eyes
Did scowl on Richard: no man cried "God save him,"
No joyful tongue gave him his welcome home.'

Parse this sentence:—

'Even now where Alpine solitudes ascend
I sit me down a pensive hour to spend.'

(2) *Dr. Beach's* '*Elements of English*,' pp. 186, 187, 200, 201, 202.

(*m*) LATIN.

See Scholarship-Latin, page 56, by Mr. L. Huxley, M.A. These articles will be continued week by week without a break.

FRENCH. *Professor Daryel's Course*, pp. 25 to 30 to end of Lesson X.

What particular authors will be set does not yet appear, but the information will be given in the 1891 code, which will be issued shortly. Both the Education Department and Mr. Heller have been applied to, but neither can as yet enlighten us.

(*n*) SCHOOL MANAGEMENT.

School Apparatus and Premises. Our Pupils should, for themselves, draw up a list of the Apparatus required to teach and illustrate the subjects of the school curricula, and to accommodate and make comfortable the scholars; and should tabulate the essential points to be investigated in order to secure sanitary and convenient school premises. The following heads are suggested:—Soil, Drainage, Aspect, Lighting, Ventilation, Warming, Cleaning, Colouring.

(*o*) PREPARATION OF FOOD.

Hughes' Domestic Economy, pp. 273 to 279.

We have received a copy of Scholarship Questions for 1887—1890, published by the National Society, price 2s. 6d. Speaking of it in general terms, it would greatly advantage Scholarship Candidates to purchase it.

SELECTED GOVERNMENT QUESTIONS.

(On portion of work already traversed).

1. One hundred and ninety-four sticks (some of which are each a yard long, and the rest are each a foot long) are placed in contact in a straight line, and measure a distance of half a furlong. How many were there of each length?

Ans. 68 and 126.

2. Prove the rule for finding the G.C.M. of *two* algebraic expressions.

3. Write down Euclid I., 5.

4. If two isosceles triangles have a common base, the line joining their vertices bisects that base.

5. Give and prove the rule for the Multiplication of Decimals

6. If 12 sheep OR 18 lambs can eat 45 bushels of turnips in 9 days, how long will it take 20 sheep AND 15 lambs to eat the same number of bushels? *Ans.* 3⅓ *days.*

7. The sides of a triangle are in the ratio of 13, 13 and 10. If its area be 3,840 sq. yards, find the length of each side.

8. Enumerate the battles fought by Marlborough, giving dates and results.

9. What were the terms of Union between England and Scotland?

10. Describe the mountain system of the United States.

11. Mention the Eastern Tributaries of the Mississippi, and name the rivers of the Eastern Coast of U.S.

12. Write down the compound verb forms which are equivalent to the following:—arise, entered, proceed, defer, affix, and surrender.

13. Classify Adjectives, with examples.

14. What are the chief points to be observed in a good system of drainage?

15. What do you mean by a *Stock-pot*? How would you manage and utilise it?

16. Write in LARGE HAND '*Indefatigable.*'
SMALL HAND '*The world knows nothing of its greatest men.*'
ROUND HAND '*Out, out, brief candle!*'

17. DICTATION.—There is no such thing | as fulfilment on this earth. | Some happy talent, | and some favourable opportunity | may form the two sides | of the ladder | on which some men mount, | but the rounds of that ladder | must be made of stuff | to stand wear and tear; | and there is no substitute | for thorough-going, | ardent, | and sincere earnestness. Never to put one hand | to anything | on which I could not throw my whole self; | and | never to affect depreciation | of my work, | whatever it was, | I find now to have been | my golden rules. |

CORRESPONDENCE.

W. T. (S. Mellion), R. J. (Ancoats), and BEL (Winchester) answered per ordinary letters.

ARCHIE (Wootton Bassett).—Gill's 2nd Grade Geometry, Collins' 2nd Grade Freehand Test Papers, Hodge's Perspective. A capital series of articles on Perspective is now appearing in our columns. We admire your enterprise, wish you success, and shall be willing to supplement this information.

G. W. P. (Staines).—(1) See any ordinary book on the Kindergarten. (2) 'A Sketch of the life of Friedrich Frobel,' Chapman & Hall, 1s.

SET.—Sorry to say No. But write to Education Department through your Correspondent. Such things as allowing the subject are not unknown.

(To be continued.)

A Course of Object-Lessons and Elementary Science.

(Adapted to the Syllabus of the New Code and of the London School Board.)

BY RICHARD BALCHIN.

Head Master under the School Board for London.

A PLENTIFUL stock of suitable objects is a prime necessity, if object teaching is to fulfil its purpose. I find in a number of schools a good cabinet of things of most charming variety. There are a great many little squatty glass bottles pleasingly arranged upon a rising gallery of shelves. This forms the background. In front and below I have almost invariably found part of the backbone of a cat, a fossil sea-urchin, a tobacco pipe, and a shark's jaw. This is called a Museum. The cabinet or glass case is always kept in one room, and locked; and there is only one of them in the school. It is scarcely ever used, because the class-teacher, should he require a specimen, has to leave his room, run about after the key and take care to return the object to the museum at the close of the lesson. This is too much trouble; takes up time; and the result is, the object lesson is given without the object. There must be a glass wall-case in each room. It must contain the specimens and apparatus which the boys in that room will require during the year. If the Managers or Board cannot afford to furnish such cases let the Head-master make them himself, as I did twenty years ago. A convenient size is:—four feet wide, two feet high, and not more than four inches deep. Let there be two glass doors, and a number of shelves about three or four inches apart.

I propose now reproducing a lesson upon the 'STONES OF THE STREETS' which I have given to a class of First Standard boys.

On the table there is a collection of pieces of various kinds of stones—granite, sandstone, limestone, marble, slate, chalk, etc. Also a hammer.

The blackboard is up and empty.

Question.—What a lot of rubbish we have on this table! What is it? Answer.—Stones. Q. All of them, stones? A's. No. That hammer *is* not a stone; that bit of chalk is not a stone; that slate is not stone. Q. Well, the hammer is truly not a stone. Jones, come out to the table; some of them say the pieces of chalk and of slate are not stones; you pick them out and put them by themselves. Now, are all the others stones? A. Yes. (Another boy)—I think the slate is a stone. Q. Do you? Why? A. Because it's got out of the ground the same as the others. (Another boy)—So is iron got out of the ground; and that hammer is not a stone. Q. Well, we will put the chalk and slate on one side and talk about them later on. You say the others are all stones. Jones, you can go to your place. Smith, you give out these ten pieces of stone to these boys, and Lee, you give out these. Now all sit down and look at what I have in my hands (holding a block of rough granite in one hand, and a block of Bath limestone in the other). Look at this one carefully. Now look at your own pieces. Those boys who have pieces like this, hold them up. Very well. Look at this other block. Those who have pieces like *this* hold them up. Right. (A boy very rough, but very observant, 'the son of a coster)—My bit ain't like narer one on 'em. Q. Let me see. You are right. It is not like either of them. Come out here, Powis. See if you can find a piece like this (granite). I want you all to look at these in my hands, and tell me whether you notice any difference between the two. A. One is white, and the other dark. Q. Is this *quite* white, like this piece of blotting paper? A. No; not so white as that. (Another boy)—It is rather yellow. Q. Any other difference? A. Yes. (From the rough observer)—One's harder than the other. (Note—I did not want this answer yet; but it oftens happens to a teacher who is giving his lesson—say before an Inspector—that some answer or boy's question, throws the subject out of the intended groove for a minute or two; and it is often amusing to notice the confusion of the teacher, who heartily wishes that inconvenient boy further, or that he could call him

out for speaking 'out of his turn.') Q. Can you *see* that this stone is harder than the other? A. Yes. Q. What is it you can *see*, which tells you it is hard? A. Because I can see it's the same stone as I put under our 'barrer' to prop it up, and it's lasted all right; but first of all we put a bit of that other sort, but it wasn't no good; it all broke up; it wasn't hard enough. Q. Why did you put such a soft stone to prop up a heavy barrow? (Note—Lay a stress on the syllable 'row,' to correct the boy's mispronunciation; but on no account make an interruption of the lesson to do so.) A. I didn't know it *was* soft. Q. Couldn't you see? A. No, I couldn't *see*, of course not; I didn't know till I tried it under the barrow. (Another boy)—He said he *could* see that that bit was hard and the other soft. (The previous boy) No, I didn't say that. I said I could see it was the same sort of stone as we put under our barrow and found out it *was* hard. You can't *see* whether a thing's hard or soft; you've got to try it. Q. Very well; but I want you to tell me some difference which you can *see* between this stone and that. A's. (1) One has a number of grits in it. (2) That one has some shining specks, and the other has none. (3) One has little bits of different colours and the other is the same all through. Q. Very well. Now put your pieces of stone on the desks and listen to me. We will call the little specks, or differently coloured bits in this piece, 'grains,' and the stone itself 'granite.' (Write on the board, at the top, 'Stones,' then 'granite made up of grains.') Come out here, Johnson. Take a piece of granite, rub it with your finger; does any come off? A. No. Q. Rub the light yellow stone. Ah! Some comes off. What does that show? A. It shows this is softer. Q. This softer stone is called 'limestone' because, when it is burnt, we get 'lime.' (Write this on the board.) As you came to school, did you notice any granite about? A's. (1) Yes. There are some gravestones at Preston's stone works made of stone like that; it is granite. (2) The curb-stone is granite. Q. Why is not limestone put for the curb? A's. (1) Because it is not hard enough. (2) Because when the carts came and rubbed against it, it would soon wear away. (Another boy)—Blackfriars Bridge is made of granite. Q. Have you noticed any of this limestone as you came along the streets? (No answer.) Has any boy passed the new houses that are being built in Camden Street? A. Yes. Q. Did you see some men working at the stone round the street door? A. Yes. There's a man cutting out a man's head just over the street door. Q. Which stone is he working in? A. Limestone. Q. Granite would last longer; why not granite? A. Too hard to cut out. Q. Come out here, James and Powis. James, put all the pieces of granite by themselves; Powis, you do the same with the limestone. Now there are several pieces left. Come here, Smith and pass them round the class. Now all look at the fresh pieces and notice whether that stone is different from the other two. Well, what do *you* say? A's. It has no different specks like granite. It is not so soft as limestone. (A boy darts up his hand, having made a discovery)—My piece *has* some shining grains. (Another boy)—My piece has lines along the edge. (Another boy)—A piece of mine has split off, and there's a layer of shining specks underneath. Q. Ah! give me that block from which a thin slice has split off. Yes, there are lines along the edge of it. See, I will hammer at the edge. Look, some more slices are coming off. I will hammer a small piece to a powder. Take up in your hand some of the powder, James. Tell the boys what it looks like. A. Sand. Q. Yes, it *is* sand, and because this stone is made up of sand we call it 'sandstone.' (Write this on the board.) Did any of you notice any of this stone as you came to school? (No answer). Well, you said the curbstone was granite. Is the pavement you walked on, granite? A. No. Q. Can you think of any reason why the pavement is not granite? A. It would be very hard to cut granite into slabs. Q. Would limestone do for the pavement? A. No. Q. Why not? A. Too soft. Q. Which now, of those three kinds of stone, do you think most suitable for the pavement? A. Sandstone. Q. Why? A. Because it easily splits up into slabs.

Finish the lesson by recapitulating the few facts taught, and call attention to the chalk and the slate; the former being a still softer limestone than Bath, and the latter splitting into plates like sandstone.

The reader of this lesson will observe that only about half-a-dozen facts have been given, and those could doubtless have been taught in five minutes. But my aim has not been merely to teach facts. It has been, in addition, to have a half-hour's exercise of the dawning perceptive faculty, and to satisfy the boys' natural inquisitiveness, and lead it in a right direction.

(To be continued.)

—o—

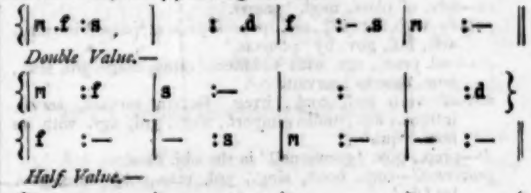
My Scholarship Answers.

BY MISS ELSIE SCOTT.

(First on the List—Females.)

Music.

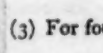
1. Re-write the following:—(1) Doubling the value of every note and rest, and (2) halving the value:—

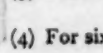


2. Describe the interval formed by the following pairs of notes:—

(1) m — t = Perf. 5th. (3) r — t = Maj. 6th.
(2) se — f' = Dim. 7th. (4) se — d' = Dim. 4th.

3. Write the pulse signs:—

(1) For two-pulse measure 

(2) For three-pulse measure 

(3) For four-pulse measure

(4) For six-pulse measure

3. Write a descending minor scale (*lah* mode), using the minor or occasional seventh and the minor or essential sixth.

l

s Minor seventh.

f Minor sixth.

m

r

d

t_1

l_1

French.

1. Translate:

(*a*) Hélas ! lui repondit son père en versant des larmes, crois-tu pauvre enfant, que *l'on puisse parler* à l'empereur comme tu parles à ton père en Sibérie? Des sentinelles gardent de toutes parts les avenues de son palais, et tu ne pourras jamais *en passer* le seuil. Pauvre et mediante, sans habits, sans recommandations, comment oseras-tu paraître, et qui daignera te présenter?

(*b*) Pendant un de ces violents orages qui sont très fréquents dans ces contrées, les bateliers, voulant éloigner la barque du rivage, poussèrent avec force une grande rame, *qui servait de gouvernail*, du côté où plusieurs personnes étaient assises sur le bord du bateau, et n'eurent plus le temps de la retirer : trois passagers, au nombre desquels étaient Prascovie, *furent renversés* dans le fleuve.

(*a*) Alas ! replied her father to her, while shedding tears, believest thou, poor child, that one can speak to the emperor, as thou speakest to thy father in Siberia? Sentinals guard, on all sides, the avenues of his palace, and thou can'st never pass there alone. Poor and beggarly, without clothes, without recommendations, how wilt thou dare to appear, and who will deign to present thee?

(*b*) During one of these violent storms, which are so frequent in these countries, the boatmen, wishing to send the boat away from the river bank, pushed with force a large oar, which served for a rudder, from the side where several persons were seated on the edge of the boat, and had no time to draw back : three passengers, of the number of whom was Prascovie, were thrown into the river.

2. Parse the words in italic :—

l' for le—def. art., sing., mas., here used for the sake of euphony.
on—indef. pron., sing., 3rd, com., nom. to 'puisse.'
puisse—verb, 3rd conj., irreg. (pourvoir, pouvant, pu), intrans., act., subj., pres., sing., 3rd, agr. with 'on.'
parler—verb, 1st conj., reg. (parler, parlant, parlé), intrans., act., inf., pres., gov. by 'puisse.'
en—adv. of place, mod. 'passer.'
passer—verb, 1st conj., reg. (passer, passant, passé), intrans., act., inf., gov. by 'pourras.'
qui—rel. pron., agr. with its antec. 'rame,' sing., 3rd. fem., nom. case to 'servait.'
servait—verb 2nd, conj., irreg. (servir, servant, servi), intrans., act., indic., imperf., sing., 3rd, agr. with its nom. 'qui.'
de—prep., gov. 'gouvernail' in the obj. case.
gouvernail—com. noun, sing., 3rd, mas., obj. case, gov. by 'de.'
furent—aux. verb, 4th, conj., irreg. (être, étant, été), intrans., indic., past def., plur., 3rd, agr. with its nom. 'passagers.'
renversés—verb, 1st, conj., reg. (renverser, renversant, renversé), trans., pass., past part., plu., mas., agr. with 'passagers,' and gov. by 'furent.'

3. Write in French :—

(1) I am very fond of reading.
(2) I see him every day.
(3) Which of these coats is yours?
(4) In what year were you born?
(5) They did not give these books to you.
(1) J'aime à lire.
(2) Je le vois tous les jours.
(3) Lequel de ces habits est le votre?
(4) Dans quelle annéeêtes-vous nés?
(5) Ils ne vous ont pas donné ces livres.

4. Put into the singular number :—(1) Ses petits pieds blancs. (2) Leurs drapeaux tricolores ; and into the plural number :—(1) Le cheval de l'ecuyer. (2) L'hôte du paysan.

(1) Son petit pied blanc.
(2) Leur drapeau tricolore.
(1) Les chevaux des ecuyers.
(2) Les hôtes des paysans.

5. Write out in words :—(*a*) the numerals from 1 to 30, (*b*) the names of the months and days of the week, (*c*) the present and perfect tenses of être, porter, recevoir, and pouvoir.

(*a*) *The numerals* :

Un, une, deux, trois, quatre, cinq, six, sept, huit, neuf, dix, onze, douze, treize, quatorze, quinze, seize, dix-sept, dix-huit, dix-neuf, vingt, vingt-et-un, vingt-deux, vingt-trois, vingt-quatre, vingt-cinq, vingt-six, vingt-sept, vingt-huit, vingt-neuf, trente.

(*b*) *The Months* :

Janvier, Février, Mars, Avril, Mai, Juin, Juillet, Août, Septembre, Octobre, Novembre, Décembre.

The Days of the Week:

Dimanche, Lundi, Mardi, Mercredi, Jeudi, Vendredi, Samedi.

Verb.	Present Tense.		Perfect Tense.	
	Singular.	Plural.	Singular.	Plural.
être	je suis tu es il est	nous sommes vous êtes ils sont	j'ai été tu as été il a été	nous avons été vous avez été ils ont été
porter	je porte tu portes il porte	nous portons vous portez ils portent	j'ai porté tu as porté il a porté	nous avons porté vous avez porté ils ont porté
recevoir	je reçois tu reçois il reçoit	nous recevons vous recevez ils reçoivent	j'ai reçu tu as reçu il a reçu	nous avons reçu vous avez reçu ils ont reçu
pouvoir	je peux tu peux il peut	nous pouvons vous pouvez ils peuvent	j'ai pu tu as pu il a pu	nous avons pu vous avez pu ils ont pu

(To be continued.)

called? Point on the sketch where you think another river might begin. What is the place called where a river enters the sea? What is a very wide mouth called? Why is the name mouth given to this part of a river? Why do we sometimes apply the name affluent to a small stream running into a larger one? What name is given to the place where the two unite? Why is it called the confluence? Point out on the sketch the mountainous land. Mention the names of some mountains you know. Some are called mountain chains. If the links of my watch-chain were taken to pieces, and each link represented a mountain, what would you call a number of mountains so separated? The name given to the hollow land between two mountains? What would you always find here, and why? What is the land washed by the sea called? If a piece of water runs a short distance into the land, what is it called? (a bay). When it runs a long distance into the land, what then is it called? What is a gulf?

STANDARD III.

Arithmetic.—

Questions were asked on the principles of arithmetic relating to the work of this standard. The usual practical tests which follow were then given, and the examination was entirely by sample.

Boys.—

(1) How many times can you take 256 from two hundred and fifty seven thousand one hundred and ninety-nine?
Ans. 1004 + 175.

(2) A gentleman's bills consisted of the following amounts; what was he owing? £16 14s. 7¾d. 79 thousand three hundred and twelve pounds 8s. 3¾d. £18 16s. 5d. £567 14s. 9½d. £46 18s. 4d.
Ans. £79962 12s. 5½d.

(3) How much must be added to £1099 17s. 0¾d. to make ten thousand and ninety-nine pounds 8s. 0½d.?
Ans. £8999 10s. 11¾d.

(4) If a man paid 7s. 9d. for his trousers and 18s. 3d. for his coat and waistcoat, and at first he had £3 in his pocket, what would he have left after paying for his suit?

Girls.—

1. Add together £27 18s. 10½d., four thousand six hundred and seventy-eight pounds 10s. 2¼d., £326 9s. 11¼d., £8,640 12s. 6d., two hundred and forty-two pounds ten shillings and eleven pence three farthings. Ans. £1,396 2s. 9¾d.

2. 1,278,001 is the dividend, and 124 the divisor. What is the quotient? Ans. 103064 + 65.

3. Subtract £4,926 17s. 10½d. from sixty thousand eight hundred and seventy-six pounds sixteen shillings and one farthing. Ans. £55,949 18s. 1¾d.

4. A little girl possessed the following sums:—In her purse she had 5s. 6d.; in her savings box, 7s. 6d.; and in her desk one shilling and 10 pence. If she gave her sister half a guinea what had she left? Ans. 4s. 4d.

Dictation.—This subject was taken from the ordinary Reader.

English.—

After the sample number had read the same children were examined in English, and the formation of sentences of a given part of speech were in great demand, together with examples of the different kinds of adjectives and adverbs. The repetition taken was Southey's 'After Blenheim,' and the children were required to know something of ancient history in connection with other battles fought in that part of the world. (Blenheim.)

Geography.—

Name some counties we should pass through in travelling from York to London. Name the towns we should pass and the rivers we should cross. What is made in the West Riding of Yorkshire? Name some towns engaged in this trade. How are woollen goods made? What mineral is required to work the mills? What is made in Lancashire? Name some towns engaged in the trade. What is found in Lancashire to carry on this trade. Name some coalfields. What is made at Newcastle? What railway should I travel on in going from York to London? What fish are caught off the coast of Cornwall? What watering place in Sussex is situated under Beachy Head? What water is that between the Isle of Wight and Hampshire? In what part of England are there many people engaged in the herring fishery? Name the railway I should travel on in going from London to Southampton? from London to Windsor? In what county is Windsor situated? What is the capital of Berkshire? Name the capital of Kent. On what river is this town? What town is that where the archbishop lives? What is largely grown in Kent? What is Kent named from? What sand banks are those off the coast of Kent? What towns on the Isle of Thanet? What is one of the main products of the farmers in Somerset and Hereford? What is made from apples? What is made from pears? Name a town of the Trent. Name some places in England where battles have been fought. What battle took place at Northallerton? What county should I have to go, to see mountain and lake scenery? What kind of scenery in Wales? Name a river rising in Plynlimmon. Another one? Name the highest mountain in England and Wales. Name a river in Yorkshire. Name some of its tributaries. Tell some towns on these tributaries.

STANDARD IV.

(BOYS.)

Arithmetic.—

Questions were asked on division by factors (30¼) 144, etc. The usual practical tests were afterwards given as follows:—

(Boys.) (1.) Find out how many square feet there are in 4 acres 9 roods. Ans. 27,250 sq. ft.

(2.) 8,824—bring these pints to bush.
Ans. 137 bush. 3 pks. 1 gal.

(3.) Divide £2,832 17s. 7½d. by 97.
Ans. £29 4s. 1d. + 74.

(4.) How much should I have in my pocket after paying 27 men 3s. 9d. each, and 29 women half a crown each, if I had £12 at first. Ans. £3 6s. 3d.

(Girls.) (1.) Divide £1,790 17s. 6¾d. by 67.
Ans. £26 14s. 7d. + 23.

(2.) Reduce 49,234 yards to acres.
Ans. 10 acs. 27 rds. 17¼ yds.

(3.) In 2½ bushels how many half pints?
Ans. 320 half pints.

(4.) An orchard produces 42,692 pts. of apples, how many quarters is that?
Ans. 83 qrs. 3 bush. 0 pks. 0 gals. 2 pts.

Dictation.—

This subject was tested from a previously unseen passage; children were expected to insert capital letters where needed.

Reading.—

A previously unseen book was used. In addition to the intelligence required to be shown of the subject read, intelligent perusal of an unseen lesson was tested after a ten minutes' preparation by numerous and searching questions.

(To be continued.)

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